

CLAIMS

1. A computer-implemented method for identifying, in a device space, an effective centerscan object color along an edge between an overscan object and a centerscan object,
5 the overscan object having a higher paint order than the centerscan object, the method comprising:

mapping the edge to the device space;

identifying a set of overscan boundary pixels in the device space, the overscan boundary pixels being device space pixels that are intersected by the edge;

10 creating a vector pointing in a direction of the centerscan object relative to the edge;

applying the vector to each overscan boundary pixel in the set of overscan boundary pixels to identify a corresponding set of centerscan boundary pixels in the device space; and

mapping each centerscan boundary pixel to the centerscan object to identify a color of the centerscan boundary pixel.

15 2. The method of claim 1, wherein the centerscan object is a raster image and the overscan object is a vector object.

3. The method of claim 2, wherein an image resolution differs from a device resolution.

20 4. The method of claim 1, wherein identifying a color of the pixel comprises:
coloring the centerscan boundary pixel in the device space in accordance with a center scan rule.

25 5. The method of claim 1, wherein creating a vector comprises:
creating a vector specified in device pixels.

6. The method of claim 1, wherein creating a vector comprises:
creating a vector normal to the edge.

30 7. The method of claim 1, wherein creating a vector comprises:

creating a vector normal to an axis in the device space.

8. The method of claim 1, wherein applying the vector to each overscan object boundary pixel comprises:

5 identifying a device pixel on the centerscan object side of the edge, adjacent to an overscan boundary pixel, as a centerscan boundary pixel.

9. The method of claim 1, further comprising:

10 identifying one or more subsections, each subsection including one or more contiguous centerscan boundary pixels having the same color, to be used in trapping

10. A computer program product, residing on a computer-readable medium, for identifying, in a device space, an effective centerscan object color along an edge between an overscan object and a centerscan object, the overscan object having a higher paint order than the centerscan object, the computer program product containing instructions for causing a computer to:

map the edge to the device space;

15 identify a set of overscan boundary pixels in the device space, the overscan boundary pixels being device space pixels that are intersected by the edge;

20 create a vector pointing in a direction of the centerscan object relative to the edge;

apply the vector to each overscan boundary pixel in the set of overscan boundary pixels to identify a corresponding set of centerscan boundary pixels in the device space; and map each centerscan boundary pixel to the centerscan object to identify a color of the centerscan boundary pixel.

25 11. The computer program product of claim 10, wherein the centerscan object is a raster image and the overscan object is a vector object.

30 12. The computer program product of claim 11, wherein an image resolution differs from a device resolution.

13. The computer program product of claim 10, wherein the computer program further includes instructions for causing a computer to:

color the centerscan boundary pixel in the device space in accordance with a center scan rule.

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14. The computer program product of claim 10, wherein the computer program further includes instructions for causing a computer to:

create a vector specified in device pixels.

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15. The computer program product of claim 10, wherein the computer program further includes instructions for causing a computer to:

create a vector normal to the edge.

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16. The computer program product of claim 10, wherein the computer program further includes instructions for causing a computer to:

create a vector normal to an axis in the device space.

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17. The computer program product of claim 10, wherein the computer program further includes instructions for causing a computer to:

identify a device pixel on the centerscan object side of the edge, adjacent to an overscan boundary pixel, as a centerscan boundary pixel.

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18. The computer program product of claim 10, wherein the computer program further includes instructions for causing a computer to:

identifying one or more subsections, each subsection including one or more contiguous centerscan boundary pixels having the same color, to be used in trapping

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19. A computer-implemented method for identifying, in a device space, an effective centerscan object color along an edge between an overscan object and a centerscan object, the centerscan object having a higher paint order than the overscan object, the method comprising:

mapping the edge to the device space;
identifying a set of device space pixels that are intersected by the edge;
determining for each pixel in the set of pixels if a center of the pixel maps to the
centerscan object;

5 identifying the pixel as a centerscan boundary pixel if the center of the pixel maps to
the centerscan object;

identifying the pixel as an overscan boundary pixel if the center of the pixel does not
map to the centerscan object;

creating a vector pointing in a direction of the centerscan object relative to the edge;

10 applying the vector to each identified overscan boundary pixel to identify a
corresponding centerscan boundary pixel to each identified overscan boundary pixel; and

mapping each centerscan boundary pixel to the centerscan object to identify a color of
the centerscan boundary pixel.

15 20. The method of claim 19, wherein the centerscan object is a raster image and the
overscan object is a vector object.

21. The method of claim 20, wherein an image resolution differs from a device
resolution.

20 22. The method of claim 19, wherein identifying a color of the pixel comprises:
coloring the centerscan boundary pixel in the device space in accordance with a
center scan rule.

25 23. The method of claim 19, wherein creating a vector comprises:
creating a vector specified in device pixels.

24. The method of claim 19, wherein creating a vector comprises:
creating a vector normal to the edge.

30 25. The method of claim 19, wherein creating a vector comprises:

creating a vector normal to an axis in the device space.

26. The method of claim 19, wherein applying the vector to each overscan object boundary pixel comprises:

5 identifying a device pixel on the centerscan object side of the edge, adjacent to an overscan boundary pixel, as a centerscan boundary pixel.

27 The method of claim 19, further comprising:

10 identifying one or more subsections, each subsection including one or more contiguous centerscan boundary pixels having the same color, to be used in trapping

28. A computer program product, residing on a computer-readable medium, for identifying, in a device space, an effective centerscan object color along an edge between an overscan object and a centerscan object, the centerscan object having a higher paint order than the overscan object, the computer program product containing instructions for causing a computer to:

15 map the edge to the device space;

identify a set of device space pixels that are intersected by the edge;

20 determine for each pixel in the set of pixels if a center of the pixel maps to the centerscan object;

identify the pixel as a centerscan boundary pixel if the center of the pixel maps to the centerscan object;

identify the pixel as an overscan boundary pixel if the center of the pixel does not map to the centerscan object;

25 create a vector pointing in a direction of the centerscan object relative to the edge;

apply the vector to each identified overscan boundary pixel to identify a corresponding centerscan boundary pixel to each identified overscan boundary pixel; and

map each centerscan boundary pixel to the centerscan object to identify a color of the centerscan boundary pixel.

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29. The computer program product of claim 28, wherein the centerscan object is a raster image and the overscan object is a vector object.

30. The computer program product of claim 29, wherein an image resolution differs from a device resolution.

31. The computer program product of claim 28, wherein the computer program further includes instructions for causing a computer to:

color the centerscan boundary pixel in the device space in accordance with a center scan rule.

32. The computer program product of claim 28, wherein the computer program further includes instructions for causing a computer to:

create a vector specified in device pixels.

33. The computer program product of claim 28, wherein the computer program further includes instructions for causing a computer to:

create a vector normal to the edge.

34. The computer program product of claim 28, wherein the computer program further includes instructions for causing a computer to:

create a vector normal to an axis in the device space.

35. The computer program product of claim 28, wherein the computer program further includes instructions for causing a computer to:

identify a device pixel on the centerscan object side of the edge, adjacent to an overscan boundary pixel, as a centerscan boundary pixel.

36. The computer program product of claim 28, wherein the computer program further includes instructions for causing a computer to:

identifying one or more subsections, each subsection including one or more contiguous centerscan boundary pixels having the same color, to be used in trapping.

37. A computer-implemented method for identifying, in a device space, an effective color along one side of an edge between a first centerscan object and a second centerscan object, the method comprising:

mapping the edge to the device space;

identifying a set of device space pixels that are intersected by the edge;

identifying a pixel in the set of device space pixels as a first object boundary pixel if the center of the pixel maps to the first centerscan object;

identifying a pixel in the set of device space pixels as a second object boundary pixel if the center of the pixel does not map to the first centerscan object;

creating a vector pointing in a direction of the second centerscan object relative to the edge;

applying the vector to each identified first object boundary pixel to identify a corresponding second object boundary pixel to each identified first object boundary pixel; and

mapping each second object boundary pixel to the second centerscan object to identify a color of the second object boundary pixel.

38. The method of claim 37, wherein at least one of the first centerscan object and the second centerscan object is a raster image.

39. The method of claim 38, wherein an image resolution differs from a device resolution.

40. The method of claim 37, wherein identifying a color of the pixel comprises: assigning a color to the second object boundary pixel in the device space in accordance with a centerscan rule.

41. The method of claim 37, wherein creating a vector comprises:

creating a vector specified in device pixels.

42. The method of claim 37, wherein creating a vector comprises:
creating a vector normal to the edge.

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43. The method of claim 37, wherein creating a vector comprises:
creating a vector normal to an axis in the device space.

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44. The method of claim 37, wherein applying the vector to each first object boundary
pixel comprises:
identifying a device pixel on the second object side of the edge, adjacent to a first
object boundary pixel, as a second object boundary pixel.

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45. The method of claim 37, further comprising:
identifying one or more subsections, each subsection including one or more
contiguous centerscan boundary pixels having the same color, to be used in trapping.

46. A computer program product, residing on a computer-readable medium, for
identifying, in a device space, an effective color along one side of an edge between a first
centerscan object and a second centerscan object, the computer program product containing
instructions for causing a computer to:

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map the edge to the device space;
identify a set of device space pixels that are intersected by the edge;
identify a pixel in the set of device space pixels as a first object boundary pixel if the
center of the pixel maps to the first centerscan object;
identify a pixel in the set of device space pixels as a second object boundary pixel if
the center of the pixel does not map to the first centerscan object;
create a vector pointing in a direction of the second centerscan object relative to the
edge;

apply the vector to each identified first object boundary pixel to identify a corresponding second object boundary pixel to each identified first object boundary pixel; and

map each second object boundary pixel to the second centerscan object to identify a color of the second object boundary pixel.

47. The computer program product of claim 46, wherein at least one of the first centerscan object and the second centerscan object is a raster image.

48. The computer program product of claim 47, wherein an image resolution differs from a device resolution.

49. The computer program product of claim 46, wherein the computer program further includes instructions for causing a computer to:

assign a color to the second object boundary pixel in the device space in accordance with a centerscan rule.

50. The computer program product of claim 46, wherein the computer program further includes instructions for causing a computer to:

create a vector specified in device pixels.

51. The computer program product of claim 46, wherein the computer program further includes instructions for causing a computer to:

create a vector normal to the edge.

52. The computer program product of claim 46, wherein the computer program further includes instructions for causing a computer to:

create a vector normal to an axis in the device space.

53. The computer program product of claim 46, wherein the computer program further includes instructions for causing a computer to:

identify a device pixel on the second object side of the edge, adjacent to a first object boundary pixel, as a second object boundary pixel.

54. The computer program product of claim 46, wherein the computer program further
5 includes instructions for causing a computer to:
- identifying one or more subsections, each subsection including one or more contiguous centerscan boundary pixels having the same color, to be used in trapping

54. The computer program product of claim 46, wherein the computer program further
5 includes instructions for causing a computer to:

- identifying one or more subsections, each subsection including one or more contiguous centerscan boundary pixels having the same color, to be used in trapping